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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,354	08/05/2003	Charles Kemper	79220	8820

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EXAMINER

KNEPPER, DAVID D

ART UNIT

PAPER NUMBER

2654

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/634,354

Applicant(s)

KEMPER ET AL.

Examiner

David D. Knepper

Art Unit

2654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

1. Applicant's correspondence filed on 5 August 2003 has been received and considered.
Claims 1-8 are pending.

Abstract

2. The Abstract of the Disclosure is objected to because it is written like a claim.
Correction is required. See M.P.E.P. § 608.01(b).

Priority Claims

3. The applicant(s) should check their filing receipts and/or the Patent Application Information Retrieval (PAIR) system for the acknowledgment of their **domestic** priority or benefit claims (if any) under 35 USC 119(e), 120 or 121 (37 CFR 1.78).

Specification

4. The disclosure is objected to because there is not brief description of the figure nor are any headings used.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.

- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Appropriate correction is required.

Claims

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Page 2 of the specification acknowledges that most “Information systems” have unique interface requirements but then goes on to suggest that this is a problem overcome by something called “Voice Query Language” which is not defined or identified in detail. Is this prior art?

The apparatus and necessary processing steps of the invention are not described. Pages 11-13 have some generic verbiage that seems to apply to the figure but none of the elements are described in such a way that the functionality of each element can be understood.

What is the function of an “Adapter module 5c”, “Domain module 5a” and “Generic module 5b”? The specification fails to identify the input data, output data and processing step(s) that would give life and meaning to these elements. It is unknown what each of these elements require regarding input, output, hardware, and processing steps.

Elements 5c and 5a are disclosed as requiring a “System analyst and linguist 3” to enable them. However, there is no explanation of what sort of analysis of the “Information system 1” is required nor what resulting information is needed by the “System analyst and linguist 3” to make these elements useful. Therefore, there is no way for the reader to determine the necessary skill level for the “System analyst and linguist 3”. Even if the reader is a skilled “System analyst and linguist 3”, the disclosure fails to identify what type(s) of analysis and resulting information is needed by the invention. Furthermore, it seems dubious that either a single person or a team of persons acting as a “System analyst and linguist 3” would be likely to know every type of simple and complex “Information system” in sufficient detail to create meaningful interactions. Because the desired “Interaction” is not explained, there is no way to predict how easy or difficult it would be to create one, nor is there any way to reach a common result among different

“System analyst and linguist 3” personnel who (assuming they do exist) could make divergent analysis and interface choices.

The “Recognition module 2a” is evidently intended to be able to recognize speech or text from a user. However, no details are provide to indicate what type of analysis of speech or text input from a user will be performed nor is any particular apparatus identified for that purpose.

It is unclear what the “Text to generation module 2b” is supposed to generate. Page 11, line 14 indicates that the transmission from 5b to 2b is supposed to be “text computer representation to be read aloud to the user.” The grammar is poor and so it is unclear whether this is supposed to mean that text is converted to speech sent to the user. However, if this is intended, then why is the transmission to item 2b rather than to the user? It is unclear what sort of output is coming from 5b that is received by 2b. No apparatus is identified for item 2b.

The claims are towards apparatus but the specification fails to describe what hardware can be used to implement the elements noted above. The specification fails to indicate whether the invention is to allow computers to communicate between users, system analysts and linguists in some sort of network communication improvement or whether the invention requires users, system analysts and linguists to collaborate together to write a series of software programs to perform desired interactions between themselves and an information system. Regardless of the intentions of the inventor, the specification fails to provide details and fails to even describe the desired results of the claimed system and the system components.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-8 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear whether the claims are attempting to emphasize a manner for making connections to an information system or is attempting to specify a control interface for accessing information. Claim 1, states "...said interaction system comprising at least one domain module for defining therein phrase set-ups that are constructed based on...classes that are common to said plurality of information systems..." indicating that the interaction system is constructed based on common information that would be obvious to one of ordinary skill in the art. This makes the entire claim read as if it is admitted prior art. It is difficult to determine what portion of the claims are intended to be admitted prior art and what portions are considered inventive. The poor language and lack of punctuation and/or indentation used in the claims make it especially difficult to determine components as well as any functional interconnections.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-8 are rejected under 35 U.S.C. § 103 as being unpatentable over Attwater (“Issues in large-vocabulary interactive speech systems”) in view of West (“Natural language database enquiry”).

The disclosure and the claims make it difficult to determine the intended scope of the invention. However, in order to advance prosecution, the prior art is applied to provide some indication of the Examiner’s best guess as to the intended invention.

As per claim 1, Attwater teaches or suggests “interaction system for enabling a user of an information system...enabling said user to interact with said information system by means of phrases generated by said user and processed by said recognition system” with his large-vocabulary interactive speech systems (title) which facilitates large-vocabulary speech recognition in interactive network services (page 177, upper right column).

The ability to define “phrases set-ups... based on object classes, attribute classes and action classes that are common to said plurality of information systems” is suggested by his vocabulary design and data modeling in combination with recognition technology (pages 181-182) showing his analysis of text and database representation which relies upon lexicons to define vocabulary and pronunciations (see figure 9). He teaches possible actions on page 184-185, figures 11, 12 and that a different systems must be analyzed based on its class of information to determine specific vocabulary generation (“grammar”) on page 186.

While this interpretation of the claim language reads on Attwater, he does not explicitly teach some terminology used such as “attribute”. However, Attwater’s methods for developing recognition vocabulary does analyze the information system (“class”) to develop lexicon (“types”) which is made up of specific vocabulary/pronunciation sets (“instances”). West

teaches a representation on pages 49-51 which shows a subject database ("class"), attribute collection ("types") and values ("instance"). Both Attwater and West have natural language interfaces. The difference between them is that Attwater focuses on interactive speech, while West focuses on natural language in a more general, textual manner (see page 54 where he indicates the user may well type in a more complicated one [question]). It would have been obvious for a person having ordinary skill in the pertinent art, at the time the invention was made, to combine speech and text for natural language interface because Attwater teaches that Mixed modality is well known to include speech and text (pages 179, alphanumeric recognizers page 182).

Claims 2-8 are rejected under similar arguments as noted above.

Prior Art

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bates (6,023,697), Monaco (6,314,402) and Chapados (6,356,869) are cited to show that it is well known to use speech recognition for various types of information system databases.

The Attwater and West references appear to have been provided by the applicant but no list of references (i.e. – Form PTO 1449) was provided so these were listed on the Examiner's cited reference list (Form PTO 892) but no copies are provided.

12. Some correspondence may be submitted electronically. See the Office's Internet Web site <http://www.uspto.gov> for additional information.

Please address mail to be delivered by the United States Postal Service (USPS) as follows:

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Fax phone number for Group 2600 is (703) 872-9306

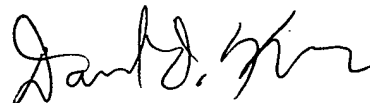
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Knepper whose telephone number is (571) 272-7607.

The examiner can normally be reached on Monday-Thursday from 07:30 a.m.-6:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil, can be reached on (571) 272-7602.

For the Group 2600 receptionist or customer service call (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Inquiries regarding the status of submissions relating to an application or questions on the Private PAIR system should be directed to the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028 between the hours of 6 a.m. and midnight Monday through Friday EST, or by email at ebc@uspto.gov. For general information about the PAIR system, see <http://pair-direct.uspto.gov>.



David D. Knepper
Primary Examiner
Art Unit 2654